DoD Automated Biometric Identification System

DoD Electronic Biometric Transmission Specification Version 1.0

Overview

19 August 2005

Overview

▸ DoD Automated Biometric Identification System (ABIS)

▸ DoD Electronic Biometric Transmission Specification (EBTS)

▸ FBI Electronic Fingerprint Transmission Specification (EFTS)

▸ DoD EBTS / EFTS Comparison

▸ DoD EBTS / EFTS Transactions

DoD ABIS

▶ Centralized biometric database

– Captures multiple biometric data types

– Searches and matches biometric data automatically

– Communicates with client applications (e.g., Biometrics Automated Toolset (BAT), Biometrics Identification System for Access (BISA))

– Interchanges data with other organizations (FBI, DHS)

▶ To ensure enterprise-wide interoperability of the DoD ABIS

– Use a common data interchange format

– Support existing transmission specification

– Implement DoD-specific data fields and transactions

DoD EBTS

▶ Addresses the transactions required to interface with the DoD ABIS

▶ Augments the FBI EFTS
  – Adds additional DoD-specific information
  – Supports multiple data types (e.g., iris, fingerprint, face)
  – Uses many EFTS capabilities

▶ Implements ANSI/NIST ITL 1-2000 data formats

▶ Enables EFTS-complaint biometric submissions to maintain compatibility with the DoD ABIS

  – DoD EBTS transactions submitted to the FBI's Integrated Automated Fingerprint Identification System (IAFIS) will not be rejected

  – IAFIS ignores additional DoD-specific information

  – Equipment generating DoD EBTS transactions is EFTS-compliant

▶ Extensible domains
  – For programs/implementations that need additional functionality
  – Example: BISA transactions have more demographic data

FBI EFTS

‣ Implements ANSI/NIST ITL 1-2000 data format

‣ Compliance required for information exchange between Criminal Justice Information Services Division
  – Integrated Automated Fingerprint Identification System (IAFIS)

‣ Allows submission of fingerprints (10-prints, latent prints), mug shots, photos of scars, marks, and tattoos

‣ Submissions to FBI are called "transactions"
  – Multiple Types of Transaction (TOT) are supported
  – Transactions and data format elements are IAFIS-specific
  – Some modalities (e.g., iris) are not supported

DoD EBTS/EFTS Comparison

	EFTS	*EBTS*
Name	Electronic Fingerprint Transmission Specification	Electronic Biometric Transmission Specification
Interfaces With	FBI IAFIS	DoD ABIS / FBI IAFIS
Use	Criminal Justice	Red Force Gray Force Blue Force
APPLICATION		
Submission	X	X
Storage	X	X
1:n Identification	X	X
1:1 Verification		X
BIOMETRIC MODALITY		
Fingerprint - 500 ppi	X	X
Fingerprint - 1000 ppi		X
Fingerprint - Latent	X	X
IMAGE		
Facial Image	X	X
Iris Image		X
Demographic data	some	more

DoD EBTS/EFTS Transactions

Transaction Name	EFTS TOT	EBTS TOT	EBTS Augmentations
10-print Submissions			
Criminal 10-print Submission - Answer Required	CAR	CAR	Options for two iris images, 1,000-ppi fingerprints, and an additional mug shot
Criminal 10-print Submission - No Answer Required	CNA		
Federal Applicant - No Charge	FANC	FANC	Options for two iris images, 1,000-ppi fingerprints, and five mug shots
Federal Applicant - User Fee	FAUF		
Non-federal Applicant User Fee	NFUF		
Miscellaneous Applicant - Civil	MAP	MAP	Options for two iris images, 1,000-ppi fingerprints, and five mug shots
Known Deceased	DEK	DEK	Options for two iris images, 1,000-ppi fingerprints, and one additional mug shot
Unknown Deceased	DEU	DEU	Options for two iris images, 1,000-ppi fingerprints, and one additional mug shot
Missing Person	MPR		
Amnesia Victim	AMN		
Remote 10-print Searches			
10-print Fingerprint Image Search	TPIS		
10-print Rap Sheet Search		TPRS	Identical to TPIS
DoD Flat Print Rap Sheet Search		DPRS	Compared to TPIS, additional Type-2 logical record fields are required. Options for two iris images, 1,000-ppi fingerprints, five mug shots, four additional 500-ppi flat prints, and up to 10 fingerprint minutiae. This is only used in special circumstances.
10-print Fingerprint Features Search	TPFS		

To view an electronic copy of the DoD EBTS, visit www.biometrics.dod.mil

DoD EBTS/EFTS Transactions (cont.)

Transaction Name	EFTS TOT	EBTS TOT	EBTS Differences from EFTS
Fingerprint Image Request and Upgrade			
Fingerprint Image Request	IRQ	IRQ	
Fingerprint Image Submission	FIS		
Criminal Subject Photo Services			
Criminal Subject Photo Request	CPR	CPR	Same
Criminal Subject Photo Delete Request	CPD		
Latent Submissions			
Latent Fingerprint Image Submission	LFS		
Comparison Fingerprint Image Submission	CFS		
Major Case Image Submission	MCS		
Evaluation Latent Fingerprint Image Submission	ELR		
Remote Latent Fingerprint Searches			
Latent Fingerprint Image Search	LFIS	LFIS	Requires additional supporting information regarding latent capture.
Latent Fingerprint Features Search	LFFS	LFFS	Requires additional supporting information regarding latent capture.
Latent Penetration Query	LPNQ		
Verification Electronic Submissions			
Verification Electronic Submission		VER	New Transaction

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Contact Information

Biometrics Management Office

Acting Director – Dr. Joseph M. Guzman

Became the BMO Director in July 2005 after serving since Jan 2005 as the BMO Director of Policy, Planning, and Liaison. Previously a Senior Economist for the Center for Naval Analyses (CNA) Corporation.

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- ❑ **Oversight**
- ❑ **Planning / Budgeting**
- ❑ **Policy & Standards Development**
- ❑ **Acquisition Process**
- ❑ **DoD Requirements Gathering**
- ❑ **Public Outreach**
- ❑ **Liaison with Other Organizations**

Biometrics Fusion Center

Director – Sam Cava

Became the BFC Director in Dec 2003, coming from West Virginia University where he was Director, Forensic and Biometric Program Development. Previously served as an Air Force officer.

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- ❑ **Test & Evaluation**
- ❑ **Biometric Knowledgebase**
- ❑ **Biometric Product List Development**
- ❑ **Repository Management**
- ❑ **Industry/Academia Interface**
- ❑ **Common Access Card (CAC) Support**
- ❑ **Technical Expertise**

www.biometrics.dod.mil

Additional Information

ANSI/NIST ITL 1-2000

▸ Approved July 2000

▸ Facilitates effective exchange of identification data between dissimilar systems

▸ Provides a common format for data interchange

▸ Supports several modalities

– Fingerprint, palm, facial (mugshot), and scar mark/tattoo images

▸ Currently undergoing revision

– Use national and international biometric standards
  • Multiple modalities using standard biometric data formats
  • Common Biometric Exchange File Format (CBEFF)
– Use modern, extensible data encodings
  • XML